WO 2005/062541 PCT/IB2004/052838

8

## **CLAIMS**

What is claimed is:

1. A method for transmitting a packet in a wireless communication system comprising the steps of: measuring (50) an idle time of a transmission medium; reducing (52) a delay time by said idle time; and transmitting (54) said packet at said reduced delay time.

- 2. The method of claim 1, wherein said step of measuring an idle time further comprises the step of providing a plurality of medium idle input signals to a counter; and counting a time period during which at least one of a predetermined number of said plurality of medium idle signals indicates that said resource is idle.
- 3. The method of claim 2, further comprising the step of: selectively enabling each of said medium idle signals to provide said predetermined number of said plurality of resource idle signals.
- 4. The method of claim 1, wherein said step of subtracting said idle time further comprises the step of: generating said delay time as the sum of a backoff time and an I(AFS) initial time.
- 5. The method of claim 1, further comprising the step of transmitting packet at said transmit time if said medium is not busy at said transmit time.
- 6. The method of claim 5, further comprising the steps of: generating a plurality of medium busy status signals; and generating a medium busy signal when at least one of a predetermined number of said plurality of medium busy status signals indicates that the resource is busy.
- 7. The method of claim 6, further comprising the step of: selectively enabling each of said medium busy status signals to provide said predetermined number of said plurality of medium busy signals..
- 8. A device for transmitting a data packet comprising: an idle timer (40) for measuring an idle time of a transmission medium; a start controller (32) for reducing a delay time associated with transmission of said data packet by said idle time; and a transmitter for transmitting said packet at said reduced delay time.
- 9. The device of claim 8, further comprising: a plurality of medium idle signals (42) input to said idle counter (40), wherein said idle counter (40) counts counting a time period during which at least one of a predetermined number of said plurality of resource idle signals indicates that said resource is idle.

WO 2005/062541 PCT/IB2004/052838

9

- 10. The device of claim 9, further comprising: means for selectively enabling each of said resource idle signals to provide said predetermined number of said plurality of resource idle signals.
- 11. The device of claim 8, wherein said start controller generates said delay time as a sum of a backoff time and an I(AFS) initial time.
- 12. The device of claim 8, wherein said transmitter transmits said data packet at said reduced delay time if said medium is not busy at said transmit time.
- 13. The device of claim 12, further comprising: a plurality of resource busy status signals which are used to generate a resource busy signal when at least one of a predetermined number of said plurality of resource busy status signals indicates that the resource is busy.
- 14. The device of claim 13, further comprising: means for selectively enabling each of said resource busy status signals to provide said predetermined number of said plurality of resource busy signals.